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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,158	01/19/2001	Young-min Cheong	1293.1173	7623

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EXAMINER

NEYZARI, ALI

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,158

Applicant(s)

CHEONG ET AL.

Examiner

ALI NEYZARI

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 and 53-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-48 and 53-55 is/are allowed.
- 6) ☒ Claim(s) 56 and 57 is/are rejected.
- 7) ☒ Claim(s) 58 and 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is followed by, "Notice of Withdrawal From Issue", mailed June 22/2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al (US 6,670,599) in view of Sauter et al (US 6,056,448).

Wagner et al disclose a semitransparent optical detector on a flexible substrate which includes a substrate (layer 3705), PIN detector 3701, VCSEL 3702 (optical system shown in Fig. 37, and col. 24, lines 3-10), thin-film photodetector (col. 23, line 40-43), wherein VCSEL can be directly interfaced with waveguides (Col 24, lines 54-56). If a lens must be integrated, using a graded-index lens which can be constructed in a flat package (col. 25, lines 1-2).

Wagner et al disclose the claimed invention except for the optical system formed over the VCSEL **"by thin film deposition"**.

Sauter et al disclose a vertical cavity surface emitting laser (VCSEL) package for compiling optical data signals through an optical coupling connector. In the lens of

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Fig 6c defraction grating structure s are provided to from the appropriate ray-bending function to properly align the output of a particular laser in VCSEL array 18 with the input of a particular optical fiber. A binary lens array may be constructed by fabricating on a separate glass structure and then bonding the array to the window. Other method to produce micro-lens arrays would be to etch or **deposit thin film lens element on optical windows.**

It would have been obvious to one of ordinary skill in the art to use the method of "thin film deposition" of Sauter in the optical system of Wagnet in order to have the optical system formed over the VCSEL by thin film deposition.

Allowable Subject Matter

Claims 1-48, and 53-55 are allowed.

Claims 58 and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALI NEYZARI whose telephone number is 571-272-7622. The examiner can normally be reached on Mon-Fri from 9:00 AM TO 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WAYNE YOUNG can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALI NEYZARI
Primary Examiner
Art Unit 2655
7-14-2005


ALI NEYZARI
PRIMARY EXAMINER